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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,285	09/19/2003	Albert X. Widmer	YOR920030040US1	7869
7590	05/05/2004		EXAMINER	
Ryan, Mason & Lewis, LLP Suite 205 1300 Post Road Fairfield, CT 06824			WILLIAMS, HOWARD L	
			ART UNIT	PAPER NUMBER
			2819	

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/666,285	WIDMER, ALBERT X.	
	Examiner	Art Unit	
	Howard L. Williams	2819	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-4, 6 and 12-27 is/are rejected.
- 7) Claim(s) 5 and 7-11 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 11 December 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>12122003</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

The examiner acknowledges receipt of the Information Disclosure Statement filed 12 December 2003. An initialed copy of the reference citation form should accompany this action.

The drawings filed 11 December 2003 are approved by the examiner.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 6 and 12-21 are rejected under 35 U.S.C. 102(b) as anticipated by Franaszek et al. (US 4,486,739).

Franašek discloses a 5B/6B encoder (12; fig. 1) which provides a 6B output by appending a sixth bit to the source words (bit i in the abcdei column of Table 1), the default value is presumed to be zero. There are 33 output words or vectors and 33 input words or vectors (claim 3). Of the output words (looking to Table 1 col. 15) fifteen have alternate words or in other words are disparity dependent. The alternate output is complement of the principal (abcdei) column. Of the remaining 18 code words or coded vectors without an entry in the alternate column these have balanced disparity or are disparity independent. Inspection of these 18 code words reveals that they are complements of each other. Thus these disparity independent code words can be described as nine code vectors with one to three selected source bits being complements to produce the other 9, which preserves the disparity balance of these words. The nine output vectors also correspond with nine input vectors; nine is clearly a minority (claims 2 and 3). Claim 4 appears to be readable upon the K.28 row of Table 1, where the control line K in figure 1 is asserted and the output vector has a trailing run of 4. Claim 6 appears to be simply a restatement of the condition of already provided in claim 1. Claim 12 is simply the code conditions of claim 1

recited as method. Franaszek also discloses a 3B/4B encoder, which rounds out the complete 8B/10B encoder. The 3B/4B encoder corresponds with Table II in column 15 and claims 14-20 appear read upon the codes conditions of Franaszek 3B/4B table and description. Claim 21 recites an 8B/10B encoder partitioned into 5B/6B and 3B/4B encoders.

Claims 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gleichert et al. (US 5,387,911) in view of Franaszek et al. (US 4,486,739). Gleichert discloses a switchable 8B/10B or 10B/12B encoder. The running disparity is detected and fed back to the input of the encoder block to detect the starting disparity and Gleichert discloses as a sync pattern 110000 010011 and 001111 011100 (clm. 5, col. 8). As Gleichert also discloses that for the 5B/6B code is identical to the 5B/6B code of the Franaszek patent in the other respect and Franaszek teaches the partitioning of the encoder for simplification of the circuitry it would have been obvious to apply a two 5B/6B encoder partition parallel input over the 5B/6B sequential nibble input taught by Gleichert to improve the byte throughput for 10B/12B operation.

Claims 5 and 7-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Widmer (US 6,496,540 B1) discloses a plurality of partitioned 10B/12B encoders.

Any inquiry concerning this communication should be directed to Howard L. Williams at telephone number 571-272-1815.

4/29/04

Howard L. Williams
Howard L. Williams
Primary Examiner
Art Unit 2819